



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,962	03/08/2001	Stefan Jung	GR 98 P 2516 P	8736
7590	03/09/2004		EXAMINER	
LERNER AND GREENBERG, P.A. Post Office Box 2480 Hollywood, FL 33022-2480			ALAVI, AMIR	
			ART UNIT	PAPER NUMBER
			2621	
			DATE MAILED: 03/09/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

8

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/801,962	JUNG, STEFAN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Amir Alavi	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 08 March 2001.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 5 and 6 is/are allowed.
- 6) Claim(s) 1 is/are rejected.
- 7) Claim(s) 2-4 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 March 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4.7</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### **Specification**

- Claim 5 is objected to because of the following informalities: wherein, "a surface upon an image", should be changed to, "a surface upon which an image".
- Appropriate correction is required.

### **Claim Rejections - 35 USC § 102**

- The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Bird et al. (US 6,108,438).

Regarding claim 1, Bird et al., disclose: providing a multiplicity of electrodes arranged in a grid and acquiring an image by measuring electrical capacitances between respective electrodes and image pixels (Please note, figure 3, in correlation to column 5, lines 30-57. As seen in this figure grid 33 is composed of plurality of electrodes and electrical capacitances being measured); acquiring, with further electrodes arranges in the grid and capacitively coupled to one another, a local average value of a corresponding measurement of the electrical capacitances in respectively delimited areas of the image and utilizing the average value as a reference value for the measured electrical capacitance at, at least one pixel within the relevant delimited area (Please note, column 8, lines 6-9. As indicated several readings of the capacitance image of a fingerprint can be taken in rapid successive over successive field periods, allowing an averaging operation to be performed for improving accuracy).

## **Allowable Subject Matter**

- Claims 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- Claims 5-6 would be allowable if rewritten or amended to overcome the objection, set forth in this Office action.
- The following is a statement of reasons for the indication of allowable subject matter: None of the prior art disclose or fairly suggest wherein having two layers of measuring electrodes formed as electrical conductors disposed at mutually different spacing distances from said surface, said electrical conductors being subdivided in accordance with the grid and mutually insulated and wherein said two layers including a first layer at a shorter distance from the surface, said first layer having further electrical conductors as reference electrodes disposed adjacent said measuring electrodes in accordance with the grid and capacitively coupled within predetermined areas, such that a locally averaged capacitive measurement can be performed around each pixel with said reference electrodes.

### **Other prior art cited**

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Borza (US 5,907,627) is pertinent as teaching a fingerprint sensing device and recognition system.

Knapp (US 5,325,442) is pertinent as teaching fingerprint sensing device and recognition system having predetermined electrode activation.

Kalnitsky et al. (US 6,011,859) is pertinent as teaching solid state fingerprint sensor packaging apparatus and method.

Young (US 5,952,588) is pertinent as teaching capacitive sensing array device.

Hamid (US 6,038,334) is pertinent as teaching method of gathering biometric information.

Harkin (US 5,978,496) is pertinent as teaching fingerprint sensing device and systems incorporating such.

Freedman et al. (US 6,259,805 B1) is pertinent as teaching biometric security encryption system.

Howker et al. (US 5,812,252) is pertinent as teaching fingerprint acquisition apparatus for access control; personal weapon and other systems controlled thereby.

McCalley et al. (US 5,956,415) is pertinent as teaching enhanced security fingerprint sensor package and related methods.

Setlak (US 5,953,441) is pertinent as teaching fingerprint sensor having spoof reduction features and related methods.

## Contact Information

- Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Amir Alavi whose telephone number is (703) 306-5913.
- The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 6:30 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Leo Boudreau, can be reached at (703) 305-4706.

Art Unit: 2621

Any response to this action should be mailed to:

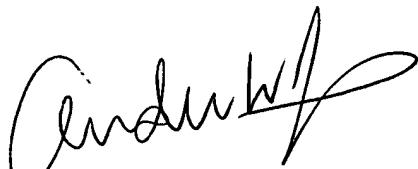
Assistant Commissioner for Patents

Washington, D.C. 20231

**Or faxed to:**

(703) 872-9306, ("draft" or "informal" communications should be clearly labeled to expedite delivery to Examiner)

**Hand delivered responses** should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application should be directed to the T.C. Customer Service Office whose telephone number is (703) 306-0377.



ANDREW W. JOHNS  
PRIMARY EXAMINER

AA  
Group Art Unit 2621  
04 March 2004